

FCC OET ELS Application

Form 442 Question 7: Experimentation Description

Confirmation No. EL795268

File No: 0037-EX-CN-2016

Submitted by: Mark Amend, Sales Engineer, Kongsberg Underwater Technology, Inc.

Date: 26 September, 2016

To Whom It May Concern:

Kongsberg Underwater Technology, Inc. kindly requests an additional experimental license to demonstrate to the US Government and commercial entities the Kongsberg Seatex A/S Maritime Broadband Radio, a phased-array antenna technology that serves as a network link between two or more units. The MBR is primarily designed for use by the coastal and offshore government and commercial sectors. We will demonstrate shore to boat/vessel network operations, including remote desktop, file transfer, voice and video over IP. Photos of a shore mobile station (MBR 189, mounted on truck, with remote desktop computers inside) and a vessel (MBR 179 on small survey boat) are included as exhibits with this application.

This application is built upon approved and active FCC licenses for the same radio arrangement and purpose:

*FCC File No. 0272-EX-RR-2015 Call Sign WG2XTC*

*FCC File No. 0036-EX-PL-2016 Call Sign WI2XFF*

Hardware connected to the MBR units includes ethernet switches on each end, two or more computers, and video/voice devices. Power will be provided by boat/portable generator or shore power. Experimental outcomes will consist of network and user experience performance statistics.

The 50km-radius area centered in Chandeleur Sound off of Pass Christian, Mississippi was selected for the purposes of deployment flexibility as well as reaching extended line-of-sight distances with minimal overlap with the terrestrial domain. Using Pass Christian Marina as a shore station of the directional version (MBR 189) provides an opportunity to operate with a survey launch offshore within that geographic area for bandwidth tests and dynamic reliability tests (boat rotations, maneuvers).

Demonstrations are expected to run over weekdays, typically a 5 day interval. Initially we have the week of November 14-18, 2016 scheduled with the US Government with follow-on activities with commercial entities in 2017.

Many thanks for your prompt consideration.

Mark Amend

Kongsberg Underwater Technology, Inc.